

**REMARKS**

The present application includes claims 1-20. Claims 1-20 were rejected by the Examiner. Claims 14 and 17 have been amended by this response.

Claims 14 and 16 were rejected under 35 U.S.C. § 102(e) as being unpatentable over Zur (U.S. Patent No. 6,178,225).

Claims 1-4, 11-13, and 19-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zur in view of Allison (U.S. Patent No. 6,094,531).

Claims 5-8, 15, and 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zur in view of Dickey (U.S. Patent No. 5,881,236).

Claims 9 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zur in view of Dickey further in view of Neal (U.S. Patent No. 6,192,518).

The Applicants first turn to the Examiner's rejection of claims 14 and 16 over Zur. Zur relates to a metering and billing system for an X-ray imaging facility (Abstract, col. 1, lines 42-50). Zur combines imaging system usage statistics and a pricing schedule to generate and distribute billing statements, not to detect or correct errors in a picture archiving and communication system (col. 5, lines 30-33). A technologist evaluates images and determines whether to accept or reject an image (col. 5, lines 58-65). The technologist increments an accepted shot counter or a rejected shot counter accordingly (col. 5, lines 43-65). Usage statistics, such as the accepted shot counter and the rejected

shot counter, are used to generate bills for customers (col. 5, lines 48-51, col. 6, lines 5-8).

Zur only discusses accepted/rejected image determination, billing, and archiving. Zur does not discuss analyzing data for an error indicator. This limitation is recited in independent claims 5, 14, and 17. Zur also does not discuss remotely correcting an error at one or more workstations. This limitation is recited in independent claims 14 and 17. In fact, Zur specifically states that an external service center may provide periodic on-site service and maintenance for the digital x-ray imaging system (col. 3, lines 37-40). Aside from that brief mention of periodic on-site service and maintenance, no other mention is made regarding service or maintenance.

Additionally, Zur does not teach or suggest installing or updating software on a plurality of picture archiving and communication system workstations. This limitation is recited in independent claims 1, 11, and 19. No mention of software or remote installation is made in Zur. No mention of simultaneously servicing a plurality of workstations is mentioned in Zur.

Thus, the Applicants respectfully submit that the pending claims are allowable in view of Zur. For example, Zur does not teach or suggest a web-based server that allows remote correction of an error at one or more picture archiving and communication system workstations. This limitation is recited in claims 14 and 16. Therefore, the Applicants submit that claims 14 and 16 are patentable over Zur.

The Applicants now turn to the Examiner's rejection of claims 1-4, 11-13, and 19-20 over Zur in view of Allison. Allison relates to a method and apparatus for automatically installing an operating system on a test computer via a serial port of the test computer (Abstract, col. 1, lines 5-11, col. 2, lines 31-34 and lines 61-65, col. 4, lines 55-63). The system of Allison is used in automated software testing systems, not in medical imaging systems or picture archiving and communication systems (col. 1, lines 46-60). There is no suggestion in Allison or in the software testing art to apply the operating system installation and software testing system of Allison to a medical imaging billing system.

In Allison, various operating systems are installed on networked computers in order to test programs (col. 4, lines 55-63, col. 6, lines 64-67, col. 7, lines 1-7). Allison uses an installer to install the operating system on a machine (col. 2, lines 43-45). The installer installs operating systems on a plurality of machines networked via the serial ports of each computer in order to test functionality and performance of a piece of software on a variety of operating system platforms (col. 2, lines 45-49). The installer installs operating systems on designated machines on request (col. 2, lines 49-51). The machines on which an operating system is being installed are set in an installation mode for the operating system to be installed (col. 2, lines 51-53). The installer determines which operating system to install on which machine through ASCII communication with the machine over the serial port (col. 5, lines 1-30). Allison also includes a dispatcher that allocates tests to be performed among available test machines (col. 3, lines 10-59).

Thus, Allison relates to a software testing system that installs operating systems on test machines in order to test software on a variety of platforms. As previously stated, Allison does not relate to medical applications. Similarly, the program testing system of Allison has no applicability to medical systems or applications. The operating system installation and software testing system of Allison also has no application to picture archiving and communication systems. Additionally, there is no suggestion in the art to combine the software testing system of Allison with the medical image billing system of Zur. Furthermore, testing software on a variety of platforms does not affect reviewing medical images in order to determine which images are acceptable for customer billing purposes.

Additionally, Allison does not teach or suggest use of a web-based server to simultaneously install software on a plurality of picture archiving and communication system workstations. This limitation is recited in independent claims 1-4, 11-13, and 19-20. Also, Allison does not teach or suggest simultaneously installing or updating software on a plurality of picture archiving and communication system workstations. This limitation is recited in independent claims 1-4, 11-13, and 19-20. Furthermore, Allison does not teach or suggest updating software on a plurality of picture archiving and communication system workstations in communication with a web-based server. This limitation is recited in claims 19-20.

Even if, for the sake of argument, Allison were combined with Zur, neither Allison nor Zur would teach or suggest simultaneously installing or updating software on a plurality of picture archiving and communication system workstations using a web-

based server. Therefore, the Applicants respectfully submit that claims 1-4, 11-13, and 19-20 are patentable over Zur in view of Allison.

The Applicants next turn to the Examiner's rejection of claims 5-8, 15, and 17-18 over Zur in view of Dickey. As stated in the Applicant's previous response, Dickey relates to remotely installing software in a client-server system (col. 1, lines 15-25). The log referenced in Dickey documents commands sent between the client and the server during login and checksum verification information (col. 6, lines 6-14). The log is a record of activity used to troubleshoot the client-server login process and checksum verification (col. 6, lines 6-14). The log does not contain error indicators corresponding to errors. The analysis referenced by the Examiner at col. 5, lines 55-67 is a checksum verification process between client and server to verify integrity of the script (col. 5, lines 55-67). The logging process mentioned in Dickey relates to verifying a user and software to be installed, not detecting and correcting errors in a system.

Thus, Dickey does not teach or suggest the limitations of the claimed invention. Specifically, Dickey does not teach or suggest analyzing data for an error indicator. This limitation is recited in claims 5-8. Also, Dickey does not teach or suggest remote correction of an error at one or more picture archiving and communication system workstations. This limitation is recited in claims 15 and 17-18. Additionally, there is no suggestion to combine the remote installation system of Dickey with the medical image billing system of Zur. However, Zur also does not teach or suggest analyzing data for an error indicator or remotely correcting an error at a picture archiving and communication

system workstation. Thus, the Applicants respectfully submit that claims 5-8, 15, and 17-18 are patentable over Zur in view of Dickey.

Finally, the Applicants turn to the Examiner's rejection of claims 9 and 10 over Zur in view of Dickey further in view of Neal. As stated in the Applicant's previous response to the Examiner's first office action, Neal relates to a method for distributing software using e-mail (col. 2, lines 19-20). Neal is not used in medical applications or picture archiving and communication systems. The system of Neal does not correct errors. Neal installs software on a personal computer, laptop, or handheld for corporate employees (col. 1, lines 13-15). Neal does not diagnose errors. Neal does not remotely diagnose and correct errors. Neal makes no mention of a log file or of errors or error correction. Neal scans an email subject header for one defined message header (col. 5, lines 9-18). Neal does not search log files for error indicators.

Thus, Neal does not teach or suggest the limitations of the claimed invention. For example, Neal does not teach or suggest analyzing log data for an error indicator. Additionally, there is no suggestion to combine the software distribution system of Neal with the medical image acceptance and billing system of Zur. However, as discussed above, neither Zur nor Dickey teaches or suggests analyzing data for an error indicator. Therefore, neither Neal, Dickey, nor Zur teach or suggest analyzing data for an error indicator. This limitation is recited in claims 9 and 10. The Applicants respectfully submit that claims 9 and 10 are patentable over Zur in view of Dickey further in view of Neal.

**CONCLUSION**

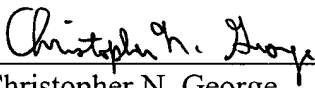
The Applicants submit that the present application is in condition for allowance.

If the Examiner has any questions or the Applicants can be of any assistance, the Examiner is invited and encouraged to contact the Applicants at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GTC, Account No. 070845.

Respectfully submitted,

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**ATTACHMENT FOR CLAIM AMENDMENTS**

U.S. Serial No. 09/472,290; Filed December 27, 1999

The following is a marked-up version showing the amendments made to the application.

**IN THE CLAIMS**

Please amend the claims as follows.

14. (Amended) An apparatus for remotely monitoring a picture archiving and communication system comprising:

a remote first terminal in communication with a web-based server via a network connection, said remote first terminal comprising a remote signal;

a plurality of picture archiving and communication system workstations connected to said web-based server; and

said web-based server comprising a data retriever for retrieving data from at least one of said plurality of picture archiving and communication system workstations responsive to said remote signal, said web-based server allowing remote correction of an error at at least one of said plurality of picture archiving and communication system workstations.

17. (Amended) A method for remotely monitoring a picture archiving and communication system, said method comprising:

connecting to a web-based server on a network;



instructing the web-based server to extract log data from at least one of a plurality of picture archiving and communication system workstations in communication with the web-based server; [and]

transmitting the log data to a remote terminal for error analysis; and  
remotely correcting an error.